

REMARKS

Status of the Claims

Claims 13, 14 and 15 are pending in this application. Claims 9-12 have been canceled. Claim 15 has been added. Support for new claim 15 is found at page 4, line 24. No new matter has been added by the above new claim. Claims 1-8 were previously canceled.

Restriction Requirement

The Examiner maintains the finality of the restriction requirement. Applicants cancel claims 11 and 12 to comply with the requirements for fully responding to the Restriction Requirement. However, Applicants reserve the right to pursue the subject matter of claims 11 and 12 in a divisional application to be filed during the pendency of this application.

Rejections under 35 USC 102(b) or 103(a)

The Examiner rejects claims 9, 13 and 14 as anticipated by or obvious over WO 95/15995 (WO '995), Tatamoto et al. USP 4,530,972 (Tatamoto '972) or Albano et al. USP 5,948,868 (Albano '868). Applicants traverse the rejection and respectfully request the withdrawal thereof.

The present invention is directed to a process for producing a cured molded article consisting essentially of the step of primarily curing a fluororubber composition comprising:

100 parts by weight of a fluororubber which is curable with an organic peroxide, 0.1 to 10 parts by weight of a polyfunctional unsaturated compound, and 0.3 to 1.2 parts by weight of an organic peroxide selected from the group consisting of dicumyl peroxide, tert.-butylcumyl peroxide and di-tert.-butyl peroxide, at a temperature of 150 to 190°C for 0.1 to 1 hour, wherein the total amount of acetone and tert.-butanol contained in the decomposed products of one mole of said organic peroxide, which are generated at a curing temperature, is 2 moles or less.

WO '995, Tatemoto '972 and Albano '686 each disclose both a primary curing step and a secondary curing step. In addition, the specific amount of the peroxide used in the claimed invention is not disclosed in the references. In the present invention when the specific organic peroxide is used in the specifically recited amount, the cured product obtained has physical properties in good balance from only the primary curing step. No secondary curing step is necessary to produce a product with the desired properties. The cited references fail to disclose or suggest obtaining a cured product that has these properties from just a primary curing step. Moreover, the cited references fail to disclose or suggest the process of making a cured product with 0.3 to 1.2 parts by weight of the specific organic peroxide.

WO '995, Tatemoto '972 and Albano '686 each use percumyl D as the organic peroxide in amounts that are outside the claimed range.

Please see Examples 1 and 2 and Comparative Examples 4 and 5 in the present specification where Examples 1 and 2 use percumyl D in amounts that are within the claimed range and Comparative Examples 4 and 5 use percumyl D in amounts that are outside the claimed range. All other components in the examples are the same.

Please see Table 1 in the specification to compare the values of $[(CS_1-CS_2)/CS_2] \times 100$, which is the criterion for the contribution of secondary curing. The results show that the contribution of secondary curing is very small in Examples 1 and 2. Thus, it can be concluded that primary curing was sufficient to produce a molded article that is suitable having the excellent properties. No secondary curing step is necessary. On the other hand, Comparative Examples 4 and 5 were defective. The results show that the contribution of secondary curing is large; thus, a secondary curing step is necessary. The cured products obtained when using the organic peroxide outside the claimed range and when there is only primary curing the products are not sufficient for appropriate use. However, the products may be further cured so that the properties of the cured products, such as compression set, vary over time.

Applicants submit that this data clearly shows that the processes disclosed in the cited art are not equivalent to the processes in the present invention. As such, Applicants submit that neither WO '995, Tatemoto '972 nor Albano '686 anticipates nor makes

obvious the present invention. Thus, Applicants respectfully request that this rejection be withdrawn.

The Examiner also rejects claims 10 and 14 as obvious over Tatemoto '972 alone or in view of WO '995 or Albano '686. Applicants rely on the arguments above showing comparative data that the processes in the cited references are outside the scope of the present invention. Particularly, Comparative Examples 4 and 5 need a secondary curing step to achieve the properties of the present invention, as demonstrated in Table 1 with Examples 1 and 2. As such, Applicants respectfully request that this rejection be withdrawn as well.

The Examiner also rejects claim 10 as obvious over WO '995, Tatemoto '972 or Albano '686 in combination with Applicants alleged admission. Applicants cancel claim 10. Thus, this rejection should be withdrawn as moot.

Conclusion

As Applicants have addressed and overcome all rejections in the Office Action, Applicants respectfully request that the rejections be withdrawn and that the claims be allowed.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Kecia Reynolds (Reg. No. 47,021) at the telephone number of the undersigned below, to

conduct an interview in an effort to expedite prosecution in connection with the present application.


If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 

Andrew D. Meikle, #32,868


ADM/KJR/jao
0020-4621P

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

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